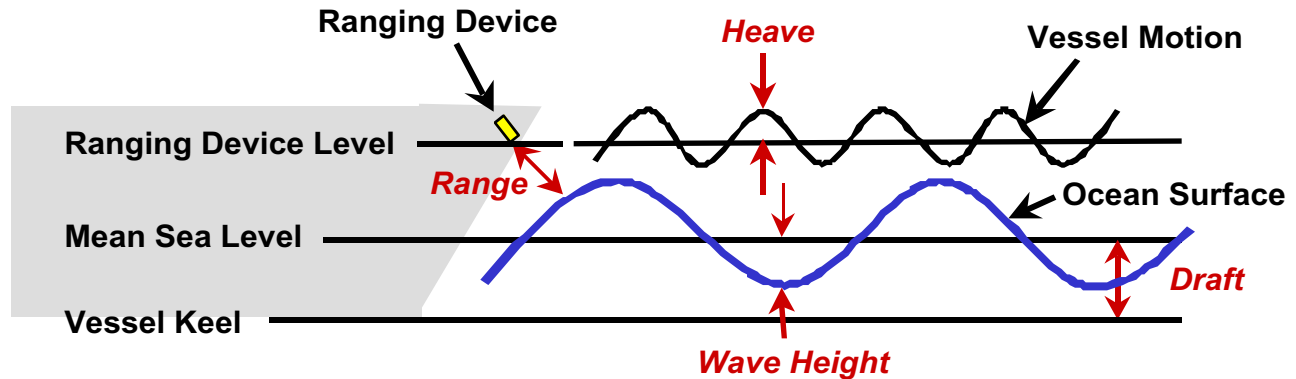


DEPTHIMETER



The Naval Research Laboratory's Depthimeter is a system for measuring the draft of a surface vessel, or the depth of a subsurface vessel, while the vessel is underway. In shallow water, draft increases with ship speed due to Bernoulli effects between the ship's hull and the sea bottom, an effect known as "squat." Accurate measurement of a vessel's draft or depth while underway is therefore especially critical for near-shore operations. The need for such sensors continues to grow as larger and faster ships navigate the world's harbors and waterways, and accidental groundings become more frequent.

Advantages include:

- ❖ Draft or depth measurement to within 5 cm
- ❖ Operation while vessel is underway
- ❖ Direct and continuous measurement of dynamic draft, including the effects of squat in shallow water
- ❖ Can be used on surface or subsurface vessels

Applications include:

- ❖ Bathymetric surveys
- ❖ On-board system to warn of imminent grounding
- ❖ Oceanographic data collection (wave height, length, direction, and period) when combined with NRL's Shipboard Wave Measurement System (SWMS) software

Patent licenses are available to companies with commercial interest.

Point of Contact

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